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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/508,813	05/30/2000	NORIO ITO	1967-190PCT	1974
2292	7590	03/22/2004		
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
			EXAMINER DANG, DUY M	
			ART UNIT 2621	PAPER NUMBER

DATE MAILED: 03/22/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/508,813

Applicant(s)

ITO ET AL.

Examiner

Duy M Dang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 46,52,57,62,67,72 and 91-101 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) 46,52,57,62,67 and 72 is/are allowed.

- 6) ☒ Claim(s) 91-93 and 95-101 is/are rejected.

- 7) ☒ Claim(s) 94 is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10-11 . 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's amendment filed on 1/6/04 to cancel claims 1-45, 47-51, 53-56, 58-61, 63-66, 68-71, and 73-90, to amend claims 46, 52, 57, 62, 67, and 72, and add new claims 91-101 have been entered and made of record. Thus, the remaining claims are 46, 52, 57, 62, 67, and 72, and 91-101.

2. The drawings (figures 3 and 6) filed on 1/6/04 has been entered and of record.

3. Applicant's amendments overcome the claim objection to under 37 CFR 1.75(c) and claim rejection section under 35 U.S.C. 112, second paragraph.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 91-93 and 95-101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chui et al. (US Patent No. 6,229,926).

Regarding claim 91, Chui teaches a decoding device (i.e., decompression 202 of figure 1 and mentioned in col. 6 lines 27-34) for receiving at its input a bit stream (i.e., the image files compressed by the compression method are decompressed decompression according to col. 2 lines 5-15) including coded information of image data divided into tiles and each separately wavelet-coded (see the machine 200 employing a wavelet transforms according to figure 1, col. 2 lines 16-34, col. 6 lines 17-19 and col. 5 lines 13-15 and 23-26), and management information for managing the coded information (see figure 3A and col. 5 lines 34-46. Note that the header data 160 refers to management information. This interpretation is consistent with Applicant's

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disclosed specification, page 12 lines 1-2), and for decoding a coded image corresponding to a necessary tile or a necessary resolution (i.e., decompression 202 of figure 1 and mentioned in col. 6 lines 27-34), and said management information includes information for specifying a memory location of the coded information corresponding to each tile or each resolution and information for managing and identifying each tile or each resolution (see figures 3A-3B and their corresponding text portion mentioned in col. 5 line 34 to col. 6 line 5. Note the “position” shown in figure 3A and “y” shown in figure 3B refer to the so called “memory location”), comprising:

- an identifying portion for identifying a memory location of the coded information corresponding to the tile or the resolution to be coded with reference to said management information according to the tile or the resolution to be coded (i.e., the identification performed by the processing circuitry 106 mentioned in col. 5 lines 34-46),

- a wavelet-decoding portion for conducting wavelet-decoding of the coded data based on the memory location of said identified coded information (see decompression 202 of figure 1; mentioned in col. 6 lines 27-34 and col. 15 lines 30-45 and col. 17 lines 12-24), and

- a tile-combining portion for combining the wavelet-decoded images of each tile (refer to figure 12 and col. 17 lines 12-25. Note that the “reconstructed image data” refers to the combination of the wavelet decoded images of each tile)

- wherein a desired area of image is decoded in a desired resolution (refer to the “reconstructed image data” shown in figure 12).

Regarding claim 92, Chui further teaches wherein said management information is arranged at the separate position from said coded information (see figure 3A (header 160 and

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data structure 162 are separated from each other) and figure 3B (header 170 and coded data 172 are separated from each other)).

Regarding claim 93, Chui further teaches wherein a size of the coded information is used as information for specifying the memory location of the coded information corresponding to said each tile or said each resolution (see the headers 160 (figure 3A) and 170 (figure 3B) and their corresponding text portion mentioned in col. 5 lines 38-68. Note the “position” shown in figure 3A and “y” shown in figure 3B refer to the so called “memory location”)

The advanced statement with regard to claim 91 above are incorporated herein.

Regarding claim 95, Chui further teaches a wavelet-decoding portion for conducting wavelet-decoding of the coded data based on the management (see decompression 202 of figure 1; mentioned in col. 6 lines 27-34 and col. 15 lines 30-45 and col. 17 lines 12-24).

Regarding claim 96, Chui further teaches wherein a tile ID is used as information for managing and identifying said each tile (see “header data 170” shown in figure 3B and mentioned in col. 5 lines 58-67).

Regarding claim 97, Chui further a coded data extracting portion for extracting a portion of the coded information from the bit stream, the portion of the coded information corresponding to a given tile based on said management information (see the decoding the header 160 in order to determine the beginning of the data 162 according to figures 3A-3B and col. 5 lines 33-46).

Regarding claim 98, Chui further teaches wherein a tile-combining portion is provided for combining the wavelet-decoded image of each tile to achieve a desired decoded image (see figure 12 and col. 17 lines 12-25 where the “reconstructed image data” corresponds to the combination of the wavelet decoded image of each tile to achieve a desired decoded image”).

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Regarding claim 99, Chui further teaches:

a tile-dividing portion for dividing an image into tiles (see figure 2);

a wavelet-encoding portion for conducting a wavelet-encoding of each tile separately to generate a coded information (i.e., the machine 200 employing a wavelet transforms according to figure 1, col. 6 lines 17-19 and col. 5 lines 13-15 and 23-26 functions as the so called “wavelet-encoding portion”);

a management information generating portion for generating management information to manage said coded information (see figure 3A and col. 5 lines 34-46. Note that the header data 160 refers to management information and it is generated by the machine 200. Thus, the machine 200 functions as the so called “management information generating portion”); and

a coded data integrating portion for integrating said management information and said coded information to generate a bitstream (i.e., the machine 200 generates an encoded data as an image file (figure 3A and col. 2 lines 5-15) comprising data 162 (col. 5 line 48) that is attached to header 160 (col. 5 lines 34-46 and figure 3A). Thus, machine 200 functions as the so called “coded data integrating portion”);

wherein the management information includes information for specifying a memory location of the coded information corresponding to each tile or each resolution and information for managing and identifying each tile or each resolution (see header 160 shown in figure 3A and its corresponding text portion mentioned in col. 5 lines 34-46. Note the “position” shown in figure 3A and “y” shown in figure 3B refer to the so called “memory location”).

The advanced statement with regard to claim 99 are incorporated herein. With regard to claim 100, Chui further teaches head location of the coded information corresponding to each tile

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(see the use of the header 160 to determine the beginning of the data 162 mentioned in col. 5 lines 40-45 and figure 3A).

Regarding claim 101, Chui further teaches wherein a tile ID is used as information for managing and identifying said each tile (see "header data 170" shown in figure 3B and mentioned in col. 5 lines 58-67).

6. Claim 94 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 46, 52, 57, 62, 67, and 72 are allowed.

8. The following is an examiner's statement of reasons for allowance:

Regarding claim 46, the closest cite prior art (US Patent No. 6,229,926 to Chui et al.) fails to teach the features of: "wherein each adjacent pixel to be attached to the object tile is multiplied by a weight function according to a distance from the objective tile, wherein each of the object tiles is attached the adjacent pixel by the adjacent pixel adding portion".

Dependent claims 52, 57, 62, 67, and 72 are also allowed for the same reasons as above

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

9. Applicant's arguments filed 1/6/04 have been fully considered but they are not persuasive.

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In reply to Applicant's remarks that Chui does not teach (a) "information for specifying a memory location of the coded information corresponding each tile or each resolution" and (b) "information for managing and identifying each tile or each resolution" (page 16 first full paragraph), the examiner disagrees because Chui does teach these features as pointed out in the claim rejection section above. For example, the (a) is met by Chui, the "position" shown in figure 3A and "y" shown in figure 3B, (b) is met by Chui, the use of information of header 160 for determining the beginning of the data 162 according to col. 5 lines 38-46 and the header 170 for determining the length of the data 172 according to col. 5 lines 58-65.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duy M Dang whose telephone number is 703-305-1464. The examiner can normally be reached on Monday to Thursday from 6:30AM to 5:00PM.

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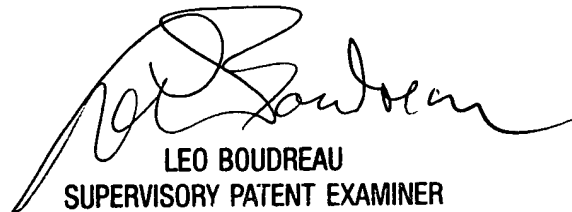
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo H Boudreau can be reached on 703-305-4706. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

Dmd

dmd

3/10/04


LEO BOUDREAU
SUPERVISORY PATENT EXAMINER
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